

Developmental Spelling: Linking Assessment & Intervention

Dr. Caroline Ramsey Musselwhite

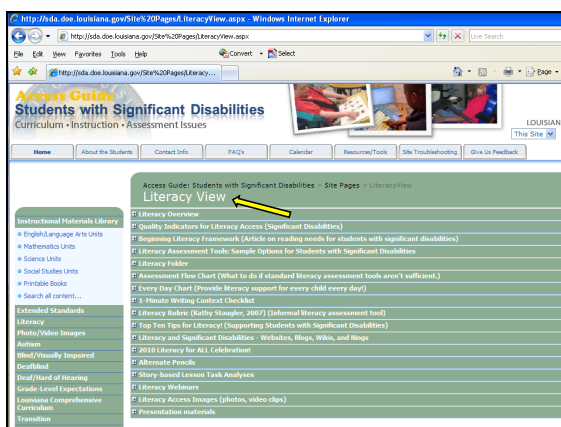
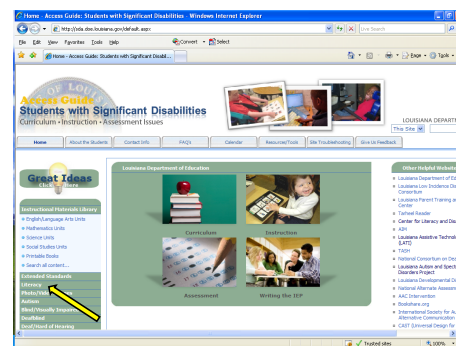
www.aacintervention.com

Goals For Today

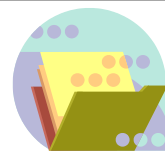
- Provide guidance on developmental spelling assessments for students with significant cognitive disabilities
 - Where to find tests
 - How to administer tests
 - Alternatives to pencil & paper
 - How to score and analyze tests
- Suggest strategies for linking assessment and instruction
 - Voting to learn onsets
 - Words for onsets / rimes
 - Visual sorts to support rimes



Access Guide (Significant Disabilities) Website <http://sda.doe.louisiana.gov>



The Literacy Folder



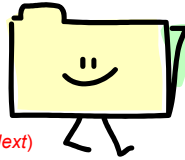
What?

- an individual student folder to follow the student across grades
- provide clear picture of literacy growth
- help team quickly access information (e.g., sample portfolio pieces, materials, strategies, and programs)

Why?

- provide seamless transition (needs, accomplishments) across grade levels
- retain formal & informal assessment data to monitor progress
- avoid wasting valuable time.

**Highly Recommended Materials
for Inclusion in Literacy Folder**



- **Formal assessments** (e.g., DIBELS *Next*)
- **Informal assessments** (e.g., Bridge, Dev Spelling Test)
- **Portfolio pieces** (e.g., writing samples; 1-minute writing checklist)
- **Literacy Experiences Summary** (describes literacy opportunities, interests, and challenges)
- **Literacy Grade Level Expectations Chart**

**Quality Indicators for Literacy Access
#1: Assessment**

- Standardized test materials
- Alternate procedures for standard tests
- **Alternate tests and materials**
- **Data-based recommendations**
- IEP team provided with clearly documented recommendations
- Alternate method for writing (as needed)

<http://sda.doe.louisiana.gov/Site%20Pages/LiteracyView.aspx>

Developmental Spelling Test

- Helps us understand what students know about the letter / sound system
- Useful for charting progress across time
- Supports targeting instruction by learning what students know, and what is confusing to them

**HOW Do We Test
Developmental
Spelling?**

'Monster Test'

DEVELOPMENTAL SPELLING TEST
SCORING CHART
Dr. J. Richard Gentry
Professor of Elementary Education and Reading

[Link at sda website](#)

SPELLING WORD LIST

- | | |
|------------|---------------------------------------------|
| 1. monster | The boy was eaten by a MONSTER. |
| 2. united | You live in the UNITED States. |
| 3. dress | The girl wore a new DRESS. |
| 4. bottom | A big fish lives at the BOTTOM of the lake. |
| 5. hiked | We HIKED to the top of the mountain. |
| 6. human | Miss Piggy is not a HUMAN. |
| 7. eagle | An EAGLE is a powerful bird. |
| 8. closed | The little girl CLOSED the door. |
| 9. bumped | The car BUMPED into the bus. |
| 10. type | TYPE the letter on the typewriter. |

How Will Students Respond?

- Ideally, students will write their answers
- **However**, most students with significant disabilities will not be able to write their answers



Should I go ahead and give a developmental spelling test, even for students who can't write and don't know the full alphabet?



YES!! This test gives valuable baseline information. Even if you don't get any scorable responses, that is useful pretest information!

Sample High-Tech Alternatives to Pen & Paper

Labelers



From office supply stores
Tiny ~1/4" keys, ~\$30

Portable Keyboards



Neo
www.alphasmart.com



Forte
www.writerlearning.com

Enlarged Computer Keyboards



Big Keys computer keyboard
1" keys www.bigkeys.com

Alphabet Page on Communication Device

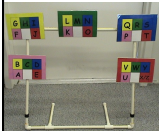


Sample Light-Tech Alternatives to Pen & Paper

Light Tech Alternative Pencils

From the Writing With Alternative Pencils CD,
Center for Literacy & Disability Studies, University of North Carolina, Chapel Hill

Eye Gaze Alphabet



Braille Flip Chart



Alphabet Flip Chart



<http://www.med.unc.edu/ahs/clds/available-for-purchase-1/available-for-purchase>

Sample Light-Tech Alternatives to Pen & Paper

AlphaBoard

Musselwhite – April, 2011 Tip of the Month, AAC Intervention

Alphabet 36					
A	B	C	D		
E	F	G	H		
I	J	K	L	M	N
O	P	Q	R	S	T
U	V	W	X	Y	Z
36 keys	36 keys	36 keys	36 keys	36 keys	36 keys

Note: Lower case on back

http://www.aacintervention.com/site/cpage.asp?cpage_id=180029277&sec_id=180009852#2011apr

Answer Sheet

- Ideally, students will write their answers, using the form shown
- However**, if a student uses an alternate method for indicating letters, write the responses on the form **and** note the method used (e.g., labeler, AlphaBoard, Vantage alphabet page)

Name: _____ Teacher: _____ Date: _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

Developmental Spelling Test Answer Form
Revised March 2011 by Dr. Caroline Ramsey Musselwhite

How Do We Score The Test?

- Use the scoring method provided on the Monster Test
- Identify the developmental spelling stage
- Analyze answers to get a score – this provides excellent pre-post data

Gentry's Developmental Spelling Stages

- PRECOMMUNICATIVE SPELLING** is the "babbling" stage of spelling. Children use letters for writing words but the letters are strung together randomly. The letters in precommunicative spelling do not correspond to sounds. Examples: OPSPS = eagle; RTAT = eighty.
- SEMPHONETIC SPELLERS** know that letters represent sounds. They perceive and represent reliable sounds with letters in a type of telegraphic writing. Spellings are often abbreviated representing initial and/or final sound. Examples: E = eagle; a = eighty.
- PHONETIC SPELLERS** spell words like they sound. The speller perceives and represents all of the phonemes in a word, though spellings may be unconventional. Examples: EGL = eagle; ATE = eighty.
- TRANSITIONAL SPELLERS** think about how words appear visually; a visual memory of spelling patterns is apparent. Spellings exhibit conventions of English orthography like vowels in every syllable, e-marker and vowel digraph patterns, correctly spelled inflectional endings, and frequent English letter sequences. Examples: EGL = eagle; EIGHTEE = eighty.
- CONVENTIONAL SPELLERS** develop over years of word study and writing. Correct spelling can be categorized by instruction levels. For example, correct spelling for a corpus...words that can be spelled by the average fourth grader would be fourth grade level correct spelling. Place the word in this category if it is listed correctly.

Gentry's Developmental Spelling Scoring

WORDS	Precommunicative Stage	Semiphonetic Stage	Phonetic Stage	Transitional Stage	Conventional Stage
1. monster	Random letters	mtr	mostr	monster	monster
2. united	Random letters	u	unitd	younighted	united
3. dress	Random letters	jrs	jrds	dres	dress
4. bottom	Random letters	bt	bodm	bottum	bottom
5. hiked	Random letters	h	hikt	hicked	hiked
6. human	Random letters	um	hum	humum	human
7. eagle	Random letters	el	egl	egul	eagle
8. closed	Random letters	kd	klosd	closed	closed
9. bumped	Random letters	b	bopt	bumpdd	bumped
10. type	Random letters	tp	tip	tipe	type

Using Data to Drive Instruction

- Summative assessment . . . Is what we're doing moving the student forward on the literacy continuum?
- Developmental spelling tests can be an excellent way to assess progress**
- This is why it is crucial to get a pretest, even if you think 'they can't do it'!

Developmental Spelling Ivette

Target Word	1/08	5/08
Back	(Attempted	bab
Sink	but became	sc
Mail	too frustrated)	ma
Dress		arz
Lake		pzx
Peeked	(she wanted to stop)	
Light		
Dragon		
Stick		
Side		
Feet		
Test		

Note: give the pretest, even if they can't do it!!!
That document a starting level. And may show the amazing progress that your students make using the alphabet!

Student Name	Developmental Spelling		
	60pts possible	ATT=Attempted	
	Pre	Post	Gain
Gilberto	34	39	5
Jonathon	17.5	24	6.5
Ivette	Att.	11	11
Bronson	12	20	8
Jancy	21	31	10
Edwin	12	28	16
Treveon	22	28	6
Tom	18	30	12
Stasha	5	29	24
Kate	Att.	Att.	0
Luis	Att.	Att.	0
H.	Att.	Att.	0

Pre-Post Testing:

Showing Progress

Try It! Now, or As Homework

- Let's try administering the Monster Test
- Work in groups of 6 – 8
- 1 person is teacher
- 1 person is student
- Get light or high tech alphabets
- If you don't have an alphabet, you're a writer ☺
- Give the test – just the first 5 words

How Do We **USE** the Results of Developmental Spelling Tests?

Formative Assessments

Formative Assessment is part of the instructional process. When incorporated into classroom practice, it provides the information needed to adjust teaching and learning while they are happening. In this sense, formative assessment informs both teachers and students about student understanding at a point when timely adjustments can be made. These adjustments help to ensure students achieve, targeted standards-based learning goals within a set time frame.

• *Garrison & Ehringhaus*
Association for Middle Level Education

Developmental Spelling		
Tom		
Target Word	1/08	5/08
Back	SPR	dc
Sink	RPIS	SC
Mail	JIPS	MO
Dress	MOM DOR	SS
Lake	KORP	NC
Peeked	POP	PC
Light	IJOR	nbT
Dragon	JOR	Jg
Stick	KOMO	SC
Side	IJRB	Sit
Feet	ROOPI	tt
Test	SOSIO	tt

Developmental Spelling		
Tom		
Target Word	1/08	5/08
Back	SPR	dc
Sink	RPIS	SC
Mail	JIPS	MO
Dress	MOM DOR	SS
Lake	KORP	NC
Peeked	POP	PC
Light	IJOR	nbT
Dragon	JOR	Jg
Stick	KOMO	SC
Side	IJRB	Sit
Feet	ROOPI	tt
Test	SOSIO	tt

What Does Tom Know About The Alphabetic Principle?

Pretest?

Posttest?

Letters are upper case
Words = 3 – 5 letters
Vowels = I & O

Letters can be upper or lower case
Initial sounds often correct
Many final sounds represented
Forgetting about vowels!

Developmental Spelling Test		
Ryan, age 13 (Using alphabet page on device)		
Target Word	8/25/10	5/18/11
back	r	bc
sink	6	fgh
mail	0 (zero)	amt
dress	1	ser
lake	6	taq
peeked	i	pkl
light	1	yu
dragon	k	dry
stick	g	sdicg
side	g	swq
feet	j	fey
test	u	sdk
Total Score	8	22

DST Worksheet

Tease out information!

Musselwhite has developed a worksheet to pull out additional information.

Measure	Pre	Post	Comments
Raw Score			
% Initial Sounds Phonetically correct			
% Final Sounds Phonetically Correct			
% Vowels Represented			
% Vowels Correct			
% Blends Represented			

TRY IT: Discuss additional information you could pull out of the Developmental Spelling Tests

DST Worksheet: Ryan

Student: Ryan Teacher: xxxxx Date: 8/25/10 - 5/18/11
Developmental Spelling Test Used: Dev Spelling Task: Back / Test
Notes: Used alphabet page on Vantage communication device

Measure	Pre	Post	Comments
Raw Score	8	22	Pre: total guessing, often guessing numbers
% Initial Sounds Phonetically correct	0%	43%	
% Final Sounds Phonetically Correct	0%	8%	
% Vowels Represented	0%	58%	
% Vowels Correct	0%	8%	
% Blends Represented	0%	33%	Note: 3 blends on test

Summary: Ryan has made huge progress. On pre-test, he guessed randomly, choosing both numbers and letters. On post-test, he:

- used only letters (no numbers)
- represented each word with 2 - 5 letters
- included vowels on more than half of his words
- correctly represented almost half of initial consonants

Recommendations: Continue writing activities that require Ryan to sound out words, such as voting by letter. Play lots of wordo games ('my word starts with G' or 'my word starts with /g/'). Encourage him to scribble often, and give feedback on correct letters. Continue supporting him on the 'vowel rule', reminding him that every word has a vowel.

Rigor: From Symbol Writing to Writing with the Alphabet

- Writing **every** day; beyond errorless!!
- Writing for authentic purposes
- Using alternative pencils, keyboards, whiteboards, etc.

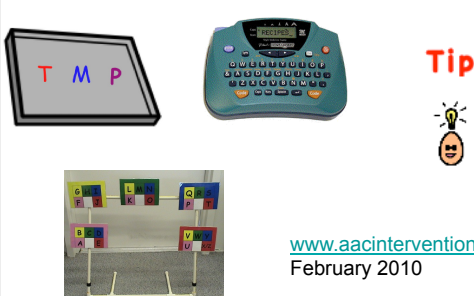
Choice board w/ 3 symbols

Alphabet 36		
A	B	C
E	F	G
I	J	K
O	P	Q
U	V	W
X	Y	Z

Insta-Charting: Initial Sounds (Onsets)



Insta-Charting: Letters



Tip

www.aacintervention.com
February 2010

Insta-Charting: Letters

Sample Activities:

- **Recess:** walk or gym (w / g)
- **Book:** read about hurricanes or tornadoes (h / t)
- **Snack:** bananas or apples (b / a)
- **Lunch:** pizza or burgers
- **Cooking:** pudding or shake
- **Guest:** principal or nurse
- **Video:** cats or dogs

Insta-Charting: Letters


Try It! Think of 5 times YOU would have students vote with letters for a REAL purpose!

Insta-Charting: How

Tips

- 1) Use photos without text – students pick what they want (pointing, eye gaze, partner scanning)
(e.g., burrito vs. pizza)
- 2) Eat the elephant in small bites – limited letters from the full alphabet
(e.g., AlphaBoard with cover up; 1 line of the alphabet flip chart; 5 letters on computer or device keyboard)

AlphaBoard Sample



- AlphaBoard with cover-up; student chose picture of 'pizza' – now trying to find the letter that starts pizza
- Use 'evaluative feedback'
 - Student points to S; partner says 'That would be 'sizza'. We're looking for 'pizza' <pause>
 - Student points to P; partner says -'/p/ - pizza' – yes, we need a P for pizza!

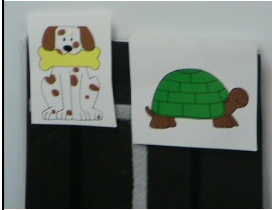
Tip: April, 2011 www.aacintervention.com

Developmental Spelling Assessment Worksheet

Student: Miguel Teacher: _____ Date: 9/2/10 – 5/3/11
Developmental Spelling Test Used: Dev Spelling Task: Back / Test
Notes: pen & pencil on [scoresheet](#)

Measure	Pre	Post	Comments
Raw Score	0	23	
% Initial Sounds Phonetically correct	0%	83%	
% Final Sounds Phonetically Correct	0%	33%	Post: attempted most final sounds
% Vowels Represented	0%	100%	Clearly learning the 'vowel rule'
% Vowels Correct	0%	42%	
% Blends Represented	0%	33%	Note: 3 blends in test

Insta-Charting



Let's Vote!!

Use the AlphaBoard or an Alternative Pencil to vote on which animal you want for:

- reading a story
- writing a story

QUOTABLE QUOTE

The day after you did the voting activity in my class, I had an IEP. I added a goal that Destiny would use the **ALPHABET** to write, not just symbols!

Kim, wonderful middle school teacher with 20 years experience

Wordo!

can	from	my
with	see	little
this	very	get



Tip:
Use
Cheerios!



Or, critters!

Focus on Onsets:

- My word starts with C
- My word starts with /k/

Student: _____ Destiny _____ Teacher: _____ Date: 8/25/10 – 5/17/11
Developmental Spelling Test Used: Dev Spelling Task: Back / Test
Notes: Used alpha board pre & post

Measure	Pre	Post	Comments
Raw Score	20	31	
% Initial Sounds Phonetically correct	58%	83%	
% Final Sounds Phonetically Correct	0%	58%	
% Vowels Represented	8%	50%	Clearly learning the 'vowel rule'
% Vowels Correct	0%	25%	
% Blends Represented	0%	33%	Note: 3 blends in test

Developmental Spelling Level:

Pre: Early semiphonetic
Post: Phonetic

Summary: Destiny now hears most initial sounds and many final sounds; she's beginning to attempt vowels, but rarely hears blends.

Recommendations: Continue focus on word endings; time for more onset + rime activities; remind her to put a vowel in every word; use the vowel line on the alpha chart

AlphaBoard – Focus on Vowels



Begin to focus on vowels

- Vowel Rule – every word has one
- AlphaBoard cover-up might help some students!

Visual Word Sorts

- Visual word sorts emphasize the orthographic processor.
- Step 1: Select two key words the student knows that have a common spelling pattern (at - pick)
- Step 2: Make sure student can read the two key words.
- Step 3: Show student a word that has the same spelling pattern as one of the key words.
- Step 4: Ask the student to indicate which key word has the same spelling pattern as the new word. Compare/Contrast the two words.

Slide from Dr. Gretchen Hanser

at	pick
fat	lick
bat	sick
sat	

Onset + Rime

Next: Onset + Rime

bl	s	ing
th	r	ank
k	no	yes

Tip:
Pick onsets & rimes from topics / reading
Ex: story has words such as 'thank' and 'thing'

Teacher's Note: For activity directions, see file "Onset/Rime Instructions."

From: *Learning to Work*, Musselwhite & Richardson
www.attainmentcompany.com

Wordo: Focus on Rimes

WORDO: PETS A

you	are	my
bad	FREE	ate
did	good	dog

Focus on Rimes:

- My word rhymes with 'sad'
- My word ends like 'hog'
- *Remember:* use evaluative feedback!

"The brain is a pattern detector, not a rule applier!"

Pat Cunningham

Try This: Discuss This – what does she know pre/post
What would be some appropriate interventions?

Developmental Spelling

Jancy

Target Word	1/08	5/08
Back	satest	bat
Sink	caotba	sek
Mail	lerttopw	letter mal
Dress	abertop	drss
Lake	liopamcw	lkiao
Peeked	piolabu	pilaer
Light	on	lamp
Dragon	dartiil	daertop
Stick	ilopamy	saertop
Side	Matiopah	sacopil
Feet	big fgiopz	feropil
Test	amiolpy	seropamn

Try This: Discuss This – what does she know pre/post
What would be some appropriate interventions?

Developmental Spelling: Stasha

Target Word	1/08	5/08
Back	ba	bat
Sink	k	kat
Mail	NR no response/attempt	mlm
Dress	NR	dod
Lake	NR	log
Peeked	NR	pin
Light	NR	lml
Dragon	NR	dak
Stick	NR	kas
Side	NR	daz
Feet	NR	fax
Test	NR	tnv

Action Plan

Outcome: Many students will take a Developmental Spelling Test. Results will be used to drive IEP writing and to tweak intervention.

Where to begin:

- Try the developmental spelling test with at least 3 students
- Use the DST Worksheet to try to tease out more information
- Pick at least one of the sample intervention activities to try
- Have a Make It / Take It to create alternative pencils
- Other ideas?